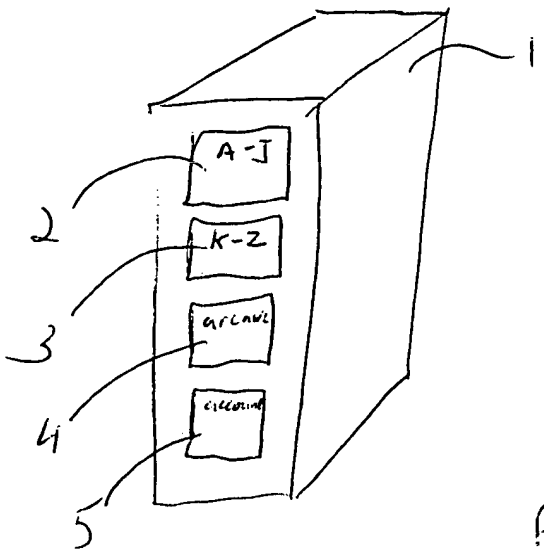
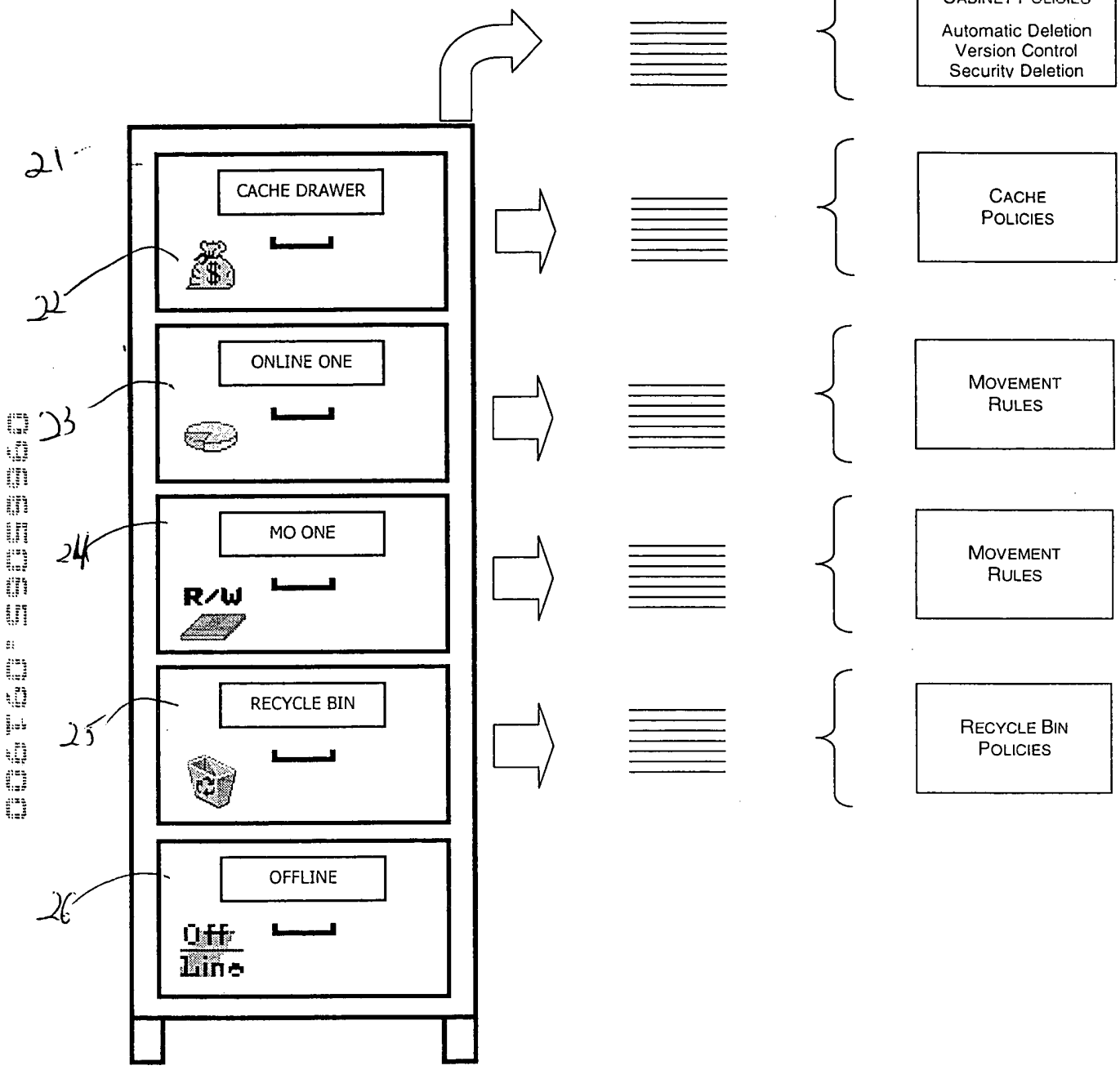


Fig. 1

VIRTUAL CABINET SCHEME

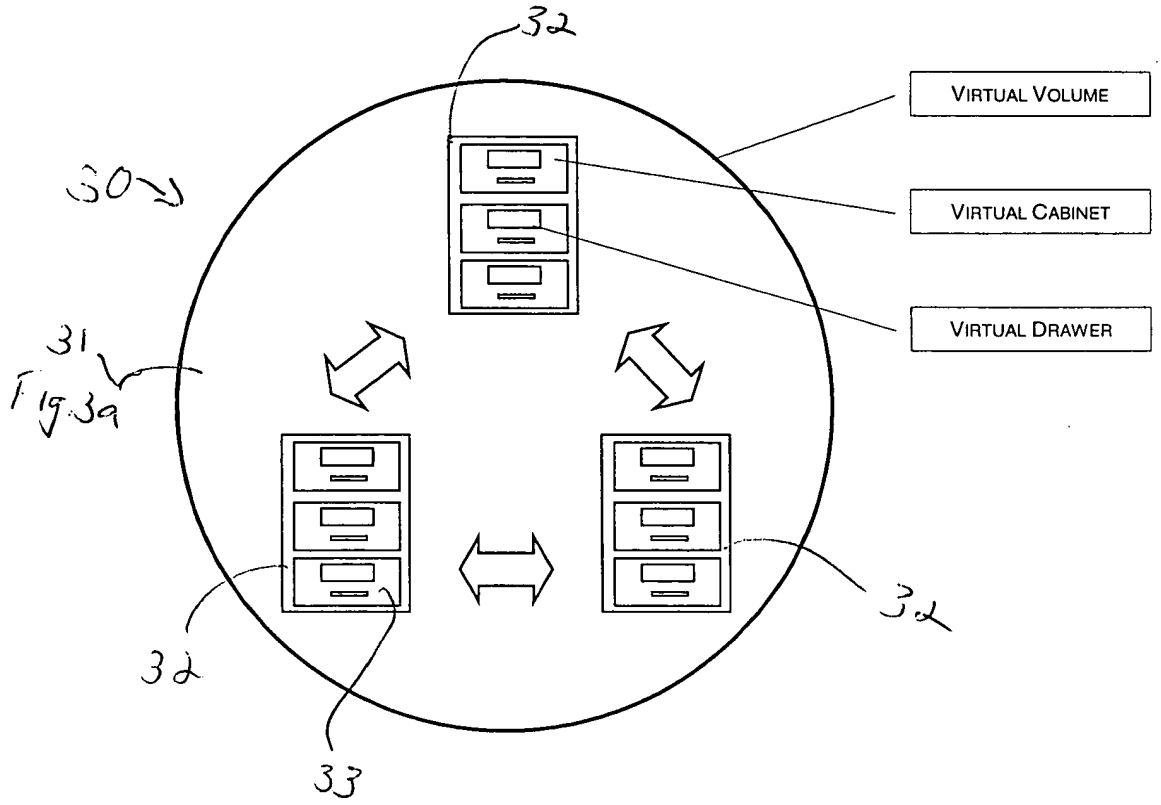
Fig. 2



FILE LIFE CYCLE MANAGEMENT

Goal: To control a file from its inception, throughout all the stages of its life, to the end of its useful existence, safely ensuring information availability and simultaneously providing a cost effective storage place, according to predefined administration policies.

The File Life Cycle will be controlled by Virtual Cabinets. A Virtual Cabinet will define the whole set of policies for governing files inside a disk subdirectory.
The cabinets will store files in Virtual Drawers. All these elements exist in a virtual storage space: a Virtual Volume.



Files will be stored inside of Virtual Drawers. These drawers can expand and shrink dynamically and will be constituted by a homogeneous media type. Besides storage, Virtual Drawers can be defined for extra purposes like caching, redundancy control, file recycling and offline management.

Each Virtual Cabinet will contain the general policies to be applied for the files under its control; in turn, each Virtual Drawer in a cabinet will include the rules for administering files in its domain.

Furthermore, a Virtual Drawer can be shared by many Virtual Cabinets.

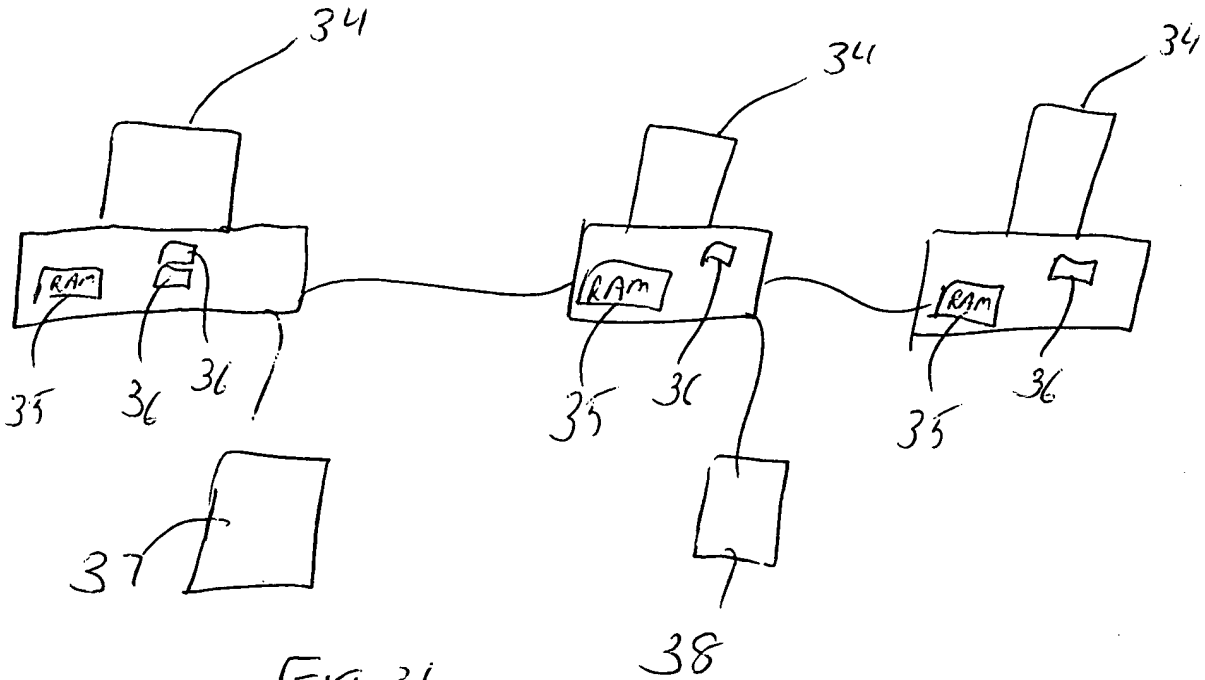


Fig. 36

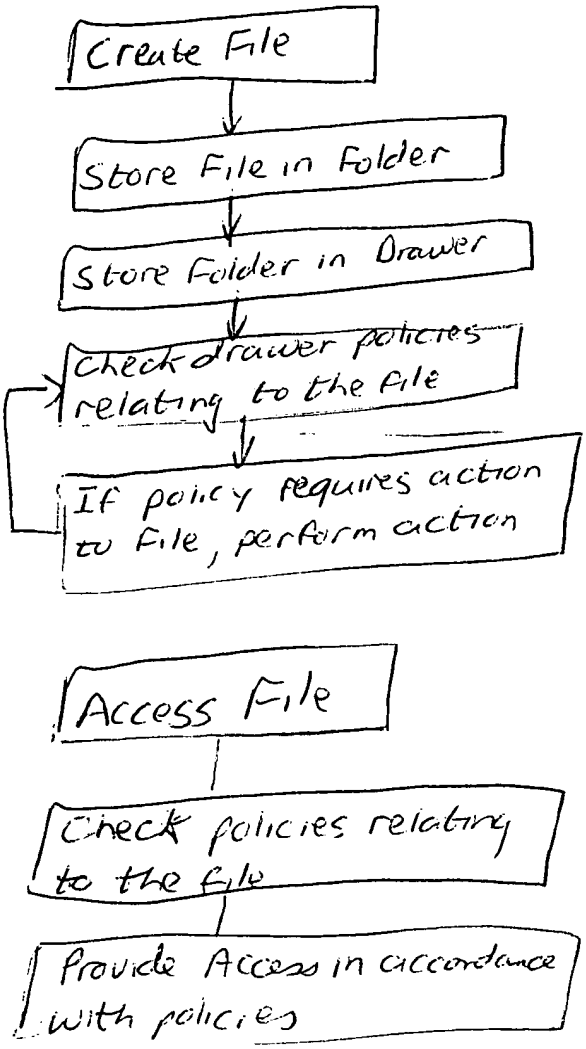

Create File
Store File in Folder
Store Folder in Drawer
Check drawer policies relating to the file
If policy requires action to File, perform action
Access File
Check policies relating to the file
Provide Access in accordance with policies

Fig. 4

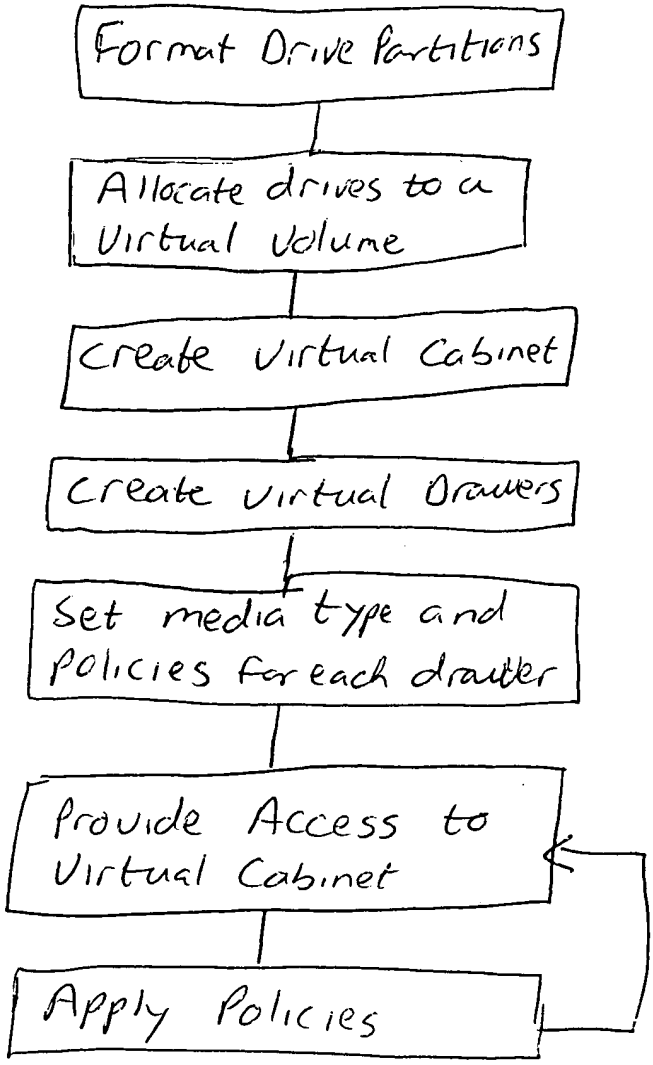
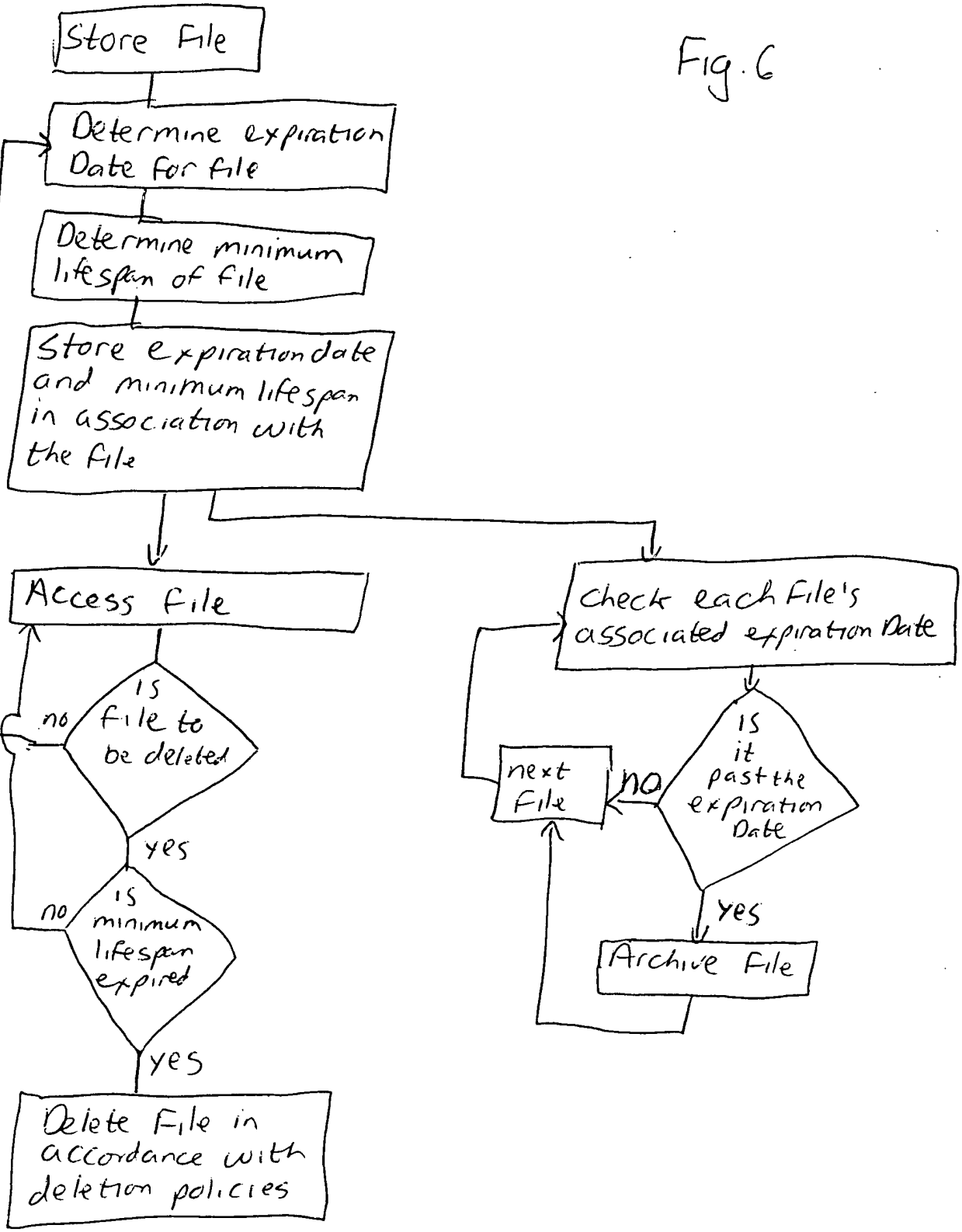


Fig. 5

- recycle bin policies
- mirroring of drawers
- drawer security
- File migration
- journaling

Fig. 6


Store File
Determine expiration Date for file
Determine minimum lifespan of file
Store expiration date and minimum lifespan in association with the file
Access File
Is file to be deleted
no
yes
Is minimum lifespan expired
no
yes
Delete File in accordance with deletion policies
Check each File's associated expiration Date
Is it past the expiration Date
no
yes
next File
Archive File